## What Is Claimed Is:

- A system for classifying occupants of a vehicle comprising:
  at least one sound-wave receiver for an occupant classification,
  situated in a seat of the vehicle; and
  at least one sound-wave transmitter situated in the seat.
- 2. The system according to claim 1, wherein the at least one sound-wave transmitter and the at least one sound-wave receiver are reversible.
- 3. The system according to claim 1, wherein the at least one sound-wave transmitter and the at least one sound-wave receiver are piezoelectric.
- 4. The system according to claim 1, wherein the system is configured for propagation-time analysis.
- 5. The system according to claim 1, wherein the system is configured for determining a shift in frequency.
- 6. The system according to claim 1, wherein the at least one sound-wave transmitter and the at least one sound-wave receiver are situated horizontally in the seat.
- 7. The system according to claim 1, wherein the at least one sound-wave transmitter and the at least one sound-wave receiver are situated vertically.
- 8. The system according to claim 1, wherein the at least one sound-wave transmitter is situated in a pressure-free manner.